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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,372	05/30/2001	Hiroshi Nemoto	791_146 CIP	8047

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EXAMINER

CREPEAU, JONATHAN

ART UNIT

PAPER NUMBER

1746

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/870,372

Applicant(s)

NEMOTO ET AL.

Examiner

Jonathan S. Crepeau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/114,323.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Information Disclosure Statement

1. The copending applications listed on the Information Disclosure Statement filed on June 12, 2001 (paper no. 2) have been updated to reflect their status as published documents. The information in these publications has been considered.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies of Japanese applications 9-202963 and 9-331537 been filed in parent Application No. 09/114,323, filed on July 13, 1998. It is further noted that Applicants have incorporated by reference Japanese publication 2000-149886 on page 1 of the instant specification. However, it appears that foreign priority under 35 U.S.C. 119(a)-(d) has not been claimed for the application corresponding to this publication (JP 10-313270).

Confirmation of this is respectfully requested in Applicant's next communication.

3. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. 120. For examination purposes herein, the parent application (09/114,323; U.S. Patent 6,344,292) is believed to adequately support claims 1, 3-8, 11-15, and 17. Therefore, these claims are accorded a U.S. filing date of July 13, 1998. Claims 2, 9, 10, 16, 18, and 19 are not believed to be supported by the parent application and are thus accorded a U.S. filing date of May 30, 2001. See MPEP §201.11. These claims are not supported because the parent application does not

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adequately indicate possession of the following features: the claimed ranges of durometer hardness and resistivity, that the second insulator comprises ethylene-propylene rubber (claim 16), and that the insulator (75) is positioned between the first end cap (73) and the first terminal (78), as recited in claim 9.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 2, 10, 16, 18, and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by JP 2000-149886. The reference is directed to a battery comprising a case, an internal electrode body (5), an electrolyte, first and second terminals (73), first and second end caps (72), and first and second insulators (74) (see abstract, Fig. 1). Regarding claim 16, the insulators are made of ethylene-propylene rubber (see paragraph 22 of the machine translation). Regarding claims 2 and 19, the rubber has a hardness of 30 durometer A to 60 durometer D (see abstract). Regarding claims 10 and 18, the rubber has a volume resistivity of at least 10^{10} ohm-cm (see paragraph 10).

Thus, the instant claims are anticipated.

6. Claims 1, 3-5, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (U.S. Patent 5,462,820). Regarding claims 1 and 11, the reference is directed to a battery comprising a case (2), an internal electrode body (3, 4, 5), an electrolyte (6), first and second terminals (2, 8), and an insulating gasket (1) positioned between the case and the second terminal (see col. 2, lines 29-37; Fig. 1). Regarding claims 3 and 11, the second terminal (8) is an end cap, and the insulator is positioned between the case/first terminal (2) and the end cap. Regarding claims 4 and 12, the case is generally cylindrical. Regarding claims 5 and 13, the case has a first crimped portion to which the end cap is clamped. Regarding claims 1 and 11, the gasket is made of an ethylene-propylene rubber (see abstract).

Thus, the instant claims are anticipated.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 771040 (Kita et al.) in view of Tanaka.

Regarding claim 1, Kita et al. teach a battery comprising a case (17), an internal electrode body, an electrolyte, first and second terminals (21, 20), and insulating gaskets (50) positioned

between the case and each terminal (see Figs. 17 and 18; col. 17, lines 14-33). The gasket is made of polypropylene (see col. 11, line 12). Regarding claims 3, 6, and 9, first and second end caps (1) are positioned at opposite ends of the case, and each insulator is positioned between each terminal and its respective end cap. Regarding claims 4 and 7, the case is generally cylindrical. Regarding claims 5 and 8, the case has a first crimped portion to which the end cap is clamped.

Kita et al. do not expressly teach that the insulators comprise an ethylene-propylene rubber, as recited in claim 1.

As noted above, Tanaka is directed to batteries comprising gaskets made of ethylene-propylene rubber.

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated by the disclosure of Tanaka to use an ethylene-propylene rubber in the gaskets of Kita et al. In column 2, line 6, Tanaka teaches that this material “permits not only the improvement in the shelf stability during storage while [the battery] is not in use, but also the reduction of the degree of deterioration during use (during charging, discharging at a high current or pulse-discharging in an atmosphere whose temperature varies).” Accordingly, the artisan would be motivated to use an ethylene-propylene rubber material in the gaskets of Kita et al.

9. Claims 1, 3-8, and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teramoto (U.S. Patent 5,571,632) in view of Tanaka.

Regarding claims 1 and 11, Teramoto teaches a battery comprising a case, an internal electrode body (13), an electrolyte, first and second terminals (12a, 11a), and an insulating gasket is (14) positioned between the case and the first terminal (see Fig. 5; col. 7, line 66). The gasket is made of polypropylene (see col. 10, line 45). Regarding claims 3, 6, 11, and 14, first and second end caps (15a) are positioned at opposite ends of the case, and the insulator is positioned between the case/first terminal (12a) and each end cap. Regarding claims 4, 7, 12, and 15, the case is generally cylindrical. Regarding claims 5, 8, 13, and 17, the case has first and second crimped portions to which the end cap is clamped.

Teramoto does not expressly teach that the insulators comprise an ethylene-propylene rubber, as recited in claims 1, 11, and 16.

As noted above, Tanaka is directed to batteries comprising gaskets made of ethylene-propylene rubber.

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated by the disclosure of Tanaka to use an ethylene-propylene rubber in the gaskets of Teramoto. In column 2, line 6, Tanaka teaches that this material "permits not only the improvement in the shelf stability during storage while [the battery] is not in use, but also the reduction of the degree of deterioration during use (during charging, discharging at a high current or pulse-discharging in an atmosphere whose temperature varies)." Accordingly, the artisan would be motivated to use an ethylene-propylene rubber material in the gaskets of Teramoto.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1, 3-5, and 11-13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,139,986 (Kurokawa et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of the '986 patent anticipate the instant claims. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).

12. Claims 1 and 3-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-53 of copending Application No. 09/863,108 (U.S. Pre-Grant Publication No. 2001/0049054). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '108 application anticipate the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 1, 3-5, and 11-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of copending Application No. 09/937,943 (U.S. Pre-Grant Publication No. 2003/0035993). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '943 application anticipate the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (703) 305-0051. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

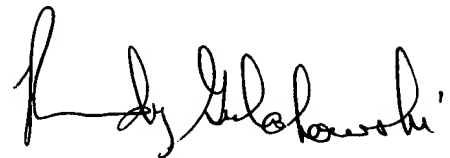
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached at (703) 308-4333. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900. Additionally, documents may be faxed to (703) 305-5408 or (703) 305-5433.

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Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JSC

March 20, 2003

A handwritten signature in black ink, appearing to read "Randy Gulakowski". The signature is fluid and cursive, with the first name "Randy" and last name "Gulakowski" clearly distinguishable.

RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700